

INSTRUCTORS BIO

Eul-Bum (EB.) Lee, Ph.D, PE, PMP: EB Lee has more than 15 years of experience in the highway construction industry (engineering, construction, and project management for pavement and bridge structures). As an assistant research engineer currently working in the University of California at Berkeley - Institute of Transportation Studies (Pavement Research Center), his professional and research interests have focused on the “Construction Management for Highway Infrastructures” including: (1) Constructability Analysis, (2) Traffic Analysis (Macro- and Microscopic Simulation), (3) Life Cycle Cost Analysis, (4) Project Delivery System Analysis (A+B, Warranty, Incentive/Disincentive, Pay Factor,) (5) Environmental Analysis (Materials Recycling and Environmental Aspects). His research, as a good example of interdisciplinary integration of Construction and Transportation, defined the optimal balance between the design, materials, construction, and traffic for urban freeway reconstruction projects. Based on his doctoral research at the UC Berkeley Construction Engineering and Management Program, he developed the professional level of knowledge-based simulation software program for Construction Analysis for Pavement Rehabilitation Strategy (*CA4PRS*) utilizing SQL database and MS Visual Basic 6.0 with a pooled research fund from the Department of Transportation of California, Texas, Minnesota, and Washington State. He has been involved into Caltrans’ Long-life Pavement Rehabilitation Strategies (LLPRS) projects including the I-10 Pomona, I-710 Long Beach, and I-15 Devore projects since 1998. His research work has been published for a variety of professional civil engineering society and transportation journals.

EB Lee’s contact point is: eblee@berkeley.edu or (510)-231-5693.

For more information, refer to the following EB Lee’s web page:

<http://www.ce.berkeley.edu/~eblee>.

EB Lee’s research colleague, **John Harvey**, (Ph.D, PE.), an associate professor in the Department of Civil and Environmental Engineering at University of California – Davis, will join the workshop as a guest speaker, and he will give an one-hour summary presentation to District (Region) Managers and Executives before the main workshop starts.

CA4PRS TRAINING WORKSHOP SCHEDULE (ONE-DAY)

MODULE I: MORNING SESSIONS

8:30 – 8:45 Workshop Start-up

8:45 – 9:45 CA4PRS Introduction

9:45 – 10:00 Morning Break (1)

10:00 – 11:00 PCC Demonstration

11:00 – 11:10 Morning Break (2)

11:10 – 12:00 Lab Exercise 1 (PCC)

12:00 – 1:00 LUNCH BREAK

MODULE II: AFTERNOON SESSIONS

1:00 – 2:00 Crack-seat & AC Overlay Demonstration
Full-depth AC Replacement Demonstration

2:00 – 2:10 Afternoon Break (1)

2:10 – 3:00 Lab Exercise 2 (Crack-seat & AC Overlay)

3:00 – 3:10 Afternoon Break (2)

3:10 – 4:00 Lab Exercise 3 (Full-depth AC)

4:00 – 4:30 Workshop Wrap-up

CA4PRS COURSE MATERIALS

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Start-up

- Workshop Start-up
- Pre-Evaluation Questionnaire Sheet
- Post-Evaluation Questionnaire Sheet
- Your Evaluation of Workshop Sheet

Chapter 1: Workshop & CA4PRS Introductions

- CA4PRS Workshop Schedule
- CA4PRS Workshop Course Summary
- Instructors Bio
- CA4PRS Introduction

Chapter 2: CA4PRS Application and Implementation Examples

- CA4PRS Validation: I-10 Pomona / I-710 Long Beach Projects
- CA4PRS Implementation : I-15 Devore Project

Chapter 3: CA4PRS Demonstration Screenshots

- Concrete Deterministic Analysis Examples
- Concrete Probabilistic Analysis Examples
- Crack-Sealing and AC Overlay Analysis Examples
- Full-depth AC Replacement Analysis Examples

Chapter 4: Course Exercises (Computer Lab)

- Analysis of a Concrete Rehabilitation Project
- Analysis of an Asphalt Rehabilitation Project

Chapter 5: CA4PRS References

- Glossary and Nomenclature
- CA4PRS Media References
- Technical Reports Published